

REMARKS

Claims 1-6, 8-10, 12, 13, 15-23, 25, 27, 28, 30, 32, 33 and 39-48 are pending in the application. Claims 7, 14, 24, 26, 31 and 34-38 have been cancelled without prejudice or disclaimer of the subject matter therein. Consequently, the rejections of claims 7, 11, 14, 24, 26, 31 and 34-38 have been rendered moot.

The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks herein.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 12-16, 18, 21, 30 and 31 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Pat. No. 5,671,362 to Cowe et al. ("Cowe") in view of U.S. Pat. No. 4,891,755 to Asher ("Asher"). This rejection is respectfully traversed.

Each of claims 1 and 21, as amended herein, include the features of generating a current state model that defines loads positioned on a load storage device, and maintaining an item database that includes a definition of one or more items potentially included in a load positioned upon the load storage device. The definition of each item includes one or more parameters that define the item. As described in the Applicants' specification, definition parameters that define the items may include a part number, product quantity per item, item weight, item height, item width, and/or item depth, for example.

Claims 1 and 21 also include the features of determining a position of the load relative to a surface of the load storage device in three dimensions based on the load signals and generating an updated current state model by modifying the current state model based on the position and the identity. By way of non-limiting example, and as described in further detail in Applicants' disclosure, loads can be tracked in one, two, or three dimensions (i.e., along an x, y, and z axis).

Although, as discussed in further detail below, Cowe fails to disclose at least these features of claims 1 and 21, and Asher fails to cure the deficient disclosure of Cowe, Applicants have further amended each of claims 1 and 21 in a genuine effort to advance prosecution of the instant application. More specifically, each of claims 1 and 21 have been further amended to provide the features of generating a current state model that defines loads positioned on a load storage device, maintaining an item database that includes a definition of one or more items

potentially included in a load positioned upon the load storage device, determining a position of the load relative to a surface of the load storage device in three dimensions based on the load signals, and generating an updated current state model by modifying the current state model based on the position and the identity.

Both Cowe and Asher also fail to disclose at least the features of determining a position of a load relative to a surface of a load storage device in three dimensions based on load signals and generating current state models by modifying current state models based on the position and the identity of an item.

As discussed in detail in Applicants' previous response, which is expressly incorporated herein by reference in its entirety, Cowe is directed to a materials monitoring system that includes an electronic shelf unit 10 that can sense and report product usage or withdrawals, by sensing the presence or absence of product items 30 in storage on the shelf unit (see col. 5, lines 37-40, for example). The system of Cowe, however, can only initiate a query in response to an item being replaced, and cannot itself resolve the query and identify the product that was replaced. Additionally, the system of Cowe cannot determine a particular position of a load relative to a surface of a load storage device in three dimensions based on both load signals and load identity.

Asher is generally directed to minibars located in hotel rooms, and more specifically to minibars that provide a means for ascertaining whether any item has been removed, its nature and its price, thus facilitating the recharging of the minibar and the charging of the bill of the guest for the item taken (Abstract). Particularly, Asher employs a system based on accurate weight measurements which are indicative of the kind of item removed by the guest. The system of Asher, however, can only determine that an item of a particular weight has been removed, and thus cannot determine the position of the item in three dimensions based on load signals, nor can the system of Asher maintain an item database that includes a definition of one or more items potentially included in a load positioned on a load storage device. Furthermore, the system of Asher cannot determine a position of the load relative to a surface of a load storage device in three dimensions based on the load signals.

For at least the foregoing reasons, Cowe and Asher, taken either alone or in combination, fail to disclose or render obvious each and every feature of claims 1 and 21. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Each of claims 12-16, 18 and 30 ultimately depends from one of claims 1 and 21, which define over the asserted references as discussed in detail above. Consequently, each of claims 12-16, 18 and 30 also defines over the asserted references for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 1 and 21 stand rejected under 35 U.S.C. § 103(a) as being obvious over Cowe in view of U.S. Pat. No. 5,083,638 to Schneider ("Schneider"). This rejection is respectfully traversed.

In general, Schneider is directed to an automated retail point-of-sale machine having the ability to allow consumers to check out their purchases with a minimal of direct human assistance (Abstract). Particularly, the system of Schneider employs a "weight change algorithm" that determines if "weight has been added to or removed from the scale" if "the current weight on a particular scale differs by greater than a predetermined error margin." (see col. 14, line 65 through col. 15, line 5, for example). Schneider, however, does not disclose determining an identity of an item corresponding to the change based on the item database, wherein the determining is executed by a processor that uses the load change as an input. Further, Schneider does not disclose determining a position of the load relative to a surface of a load storage device in three dimensions based on the load signals, or generating an updated state model by modifying the current state model based on the position and the identity of the item. For at least these reasons, Schneider fails to disclose or render obvious each and every feature of claims 1 and 21. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 2-9, 19, 20, 22-27, 32, and 33 stand rejected under 35 U.S.C. § 103(a) as being obvious over Cowe in view of Asher, in further view of U.S. Pat. No. 4,674,605 to McPherson et al. ("McPherson"). This rejection is respectfully traversed.

With the exception of cancelled claims 7, 24 and 26, each of claims 2-9, 19, 20, 22-27, 32 and 33 ultimately depend from one of claims 1 and 21, which define over the asserted references, as discussed in detail above. Consequently, each of claims 2-6, 8, 9, 19, 20, 22-23, 27, 32, and

33 also defines over the asserted references for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 10 and 28 stand rejected under 35 U.S.C. § 103(a) as being obvious over Cowe in view of Asher, in view of McPherson, in further view of U.S. Pat. No. 4,961,533 to Teller et al. ("Teller"). Claim 17 stands rejected under 35 U.S.C. § 103(a) as being obvious over Cowe in view of Asher, in further view of U.S. Pat. No. 6,450,299 to Lysaught ("Lysaught"). These rejections are respectfully traversed.

Claims 10, 17 and 28 ultimately depend from one of claims 1 and 21, which define over the asserted references as discussed in detail above. Consequently, each of claims 10, 17 and 28 also defines over the asserted references for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 34-38 stand rejected under 35 U.S.C. § 103(a) as being obvious over Cowe in view of Teller. As detailed above, claims 34-38 have been cancelled without prejudice or disclaimer of the subject matter therein.

Other Claim Amendments

Claims 39-48 have been added. Support for claims 39-48 can be found in Applicants' specification on page 14, lines 19-28; page 8, lines 23-32; and page 9, lines 1-16. No new matter has been added.

Claim 39 pertains to a system implementing features of claim 1. Consequently, claim 39 defines over the asserted references for at least the same reasons as discussed above with respect to claim 1. Claims 40-48 ultimately depend from one of claims 1, 21 or 39, each of which defines over the asserted references, as discussed in detail above. Consequently, each of claims 39-48 also defines over the asserted references for at least the same reasons. Further, each of claims 39-48 recites features that are neither disclosed nor rendered obvious by the asserted references. As such, each of claims 39-48 are allowable in their own right. Therefore, favorable consideration and allowance of each of claims 39-48 are respectfully requested.

CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reason for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to amendment. Applicants respectfully request consideration of all filed IDS' not previously considered, by initialing and returning each Form 1449.

The undersigned attorney welcomes the opportunity to further discuss by telephone any position or issue not fully addressed by the above remarks and amendments.

No charges are believed due. However, if any fees are due, they are being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply all charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 13909-0141001.

Respectfully submitted,

Date: Oct. 15, 2004



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